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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,652	08/26/2003	Thomas Brendel	03100131US	2125

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EXAMINER
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BOTTORFF, CHRISTOPHER

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/647,652

Applicant(s)

BRENDEL, THOMAS

Examiner

Christopher Bottorff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

The amendment filed July 7, 2005 has been entered. The substitute specification is approved. Claims 15-20 are added and claims 1-20 are pending.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, in the event that the limitation "about a circumference" in line 6 of claim 15 requires the recess to extend entirely around the circumference of the fork pin, the recess extending entirely around the circumference must be shown or the feature canceled from the claim. No new matter should be entered. Currently, the recess is depicted as only occupying a portion of the circumference of the fork pin. Note recess 13 in Figures 4 and 5.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 15 is objected to because of the following informalities: the term "rotatable" in line 3 should be "rotatably." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "the lever" on line 8 but is not clear as to which lever is provided with a run-on slope. Claim 12 defines two levers on line 7, a linearly displaceable lever and a pivot lever. Although the lever of line 8 refers to one of the levers of line 7, claim 12 does not specify which lever. For the purposes of examination, the lever of line 8 is interpreted as being the linearly displaceable lever.

Claim 15 recites the limitation "about a circumference" in line 6, which suggests that the recess extends entirely around the circumference of the fork pin. However, the

disclosure suggests that the recess only occupies a portion of the circumference of the fork pin without extending entirely around the circumference. Figures 4 and 5 depict recess 13, but only show recess 13 at a portion of the fork pin circumference.

Consequently, the scope of the expression "about a circumference" is not clear. For the purposes of examination, the limitation "about a circumference" is interpreted as requiring the recess to only occupy a portion of the circumference of the fork pin.

Claim 20 recites the limitation "the connecting linkage" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9, 15, 16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee US 6,302,421.

Lee discloses a wheelchair having two pedal driven wheels 26 and at least one castor 14 which is mounted in a rotatable manner in a fork 12F which can be pivoted about a vertical axis. See Figures 1A-1N and column 8, lines 12-14. The fork 12F has an upwardly projecting fork pin 12A and is connected to a steering linkage 34, 38,

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wherein the connection between the fork 12F and the steering linkage 34, 38 is releasable by actuation of a bolt in coupling 32 which is subject to a load by a spring. See Figures 1B and 1N and column 8, lines 49-50 and 62-67. A recess 12D about a circumference of the fork pin 12A is engageable with the bolt to releasably connect the fork 12F to the steering linkage 34, 38. See Figures 1B and 1N.

The at least one caster 14 comprises two castors each mounted in a fork 12F. See Figure 1B. The forks 12F are connected to one another via the steering linkage 34, 38. See Figure 1B. The forks 12F are mounted such that each can be rotated about a vertical axis through 360 degrees. See column 8, lines 50-53. The forks 12F can be blocked mechanically in relation to the steering linkage by coupling 32, and can be blocked in the straight-ahead position of the castors unless steered in another direction. See Figures 1M and 1F. The forks 12F are each mounted, via the fork pin 12A and bearings, in a bushing 12B. See Figure 1N. The bolt can be pushed, transversely to the vertical axis, into the recess 12D in the fork pin 12A. See Figures 1M and 1N. The bolt is subjected to loading by a compression spring and can be displaced counter to the force of the compression spring. See column 8, lines 62-67. Also, the bolt is connected to an actuating lever (formed by the ring disposed on the end of the pin opposite fork pin 12A), which is mounted in a pivotable manner on a spindle (formed by the coupling housing that surrounds and supports the pin in coupling 32). See Figure 1N.

***Claim Rejections - 35 USC § 103***

Claims 10, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee US 6,302,421 in view of Kovacs US 5,170,529.

Lee does not disclose a pivot-lever arrangement as defined in claims 10, 11, and 14. However, Kovacs teaches the desirability of providing such a pivot-lever arrangement on a caster wheeled vehicle. See Figures 3 and 4. The bolt 50 can be displaced via a pivot-lever arrangement 26, 44 in which the bolt 50 is displaced via a linearly displaceable lever 44 acted on by a pivot lever 26. See Figure 4. Also, the pivot lever 26 has a rounded protuberance at its front end. See Figures 3 and 4.

From the teachings of Kovacs, providing the wheelchair of Lee with a pivot-lever arrangement as claimed would have been obvious to one of ordinary skill in the art at the time the invention was made. Such a modification would provide a structure that efficiently actuates the bolts of each caster.

Claims 15, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee US 6,302,421 in view of Chiu US 6,402,166.

Lee discloses a wheelchair comprising two pedal driven wheels 26, at least one castor 14 rotatably mounted in a fork 12F pivotable about a vertical axis, a steering linkage 34, 38, and a recess 12D which is engageable with a bolt in coupling 32 to releasably connect the fork 12F to the steering linkage 34, 38. See Figures 1A-1N and column 8, lines 12-14. The fork 12F has an upwardly projecting fork pin 12A and the fork pin 12A is mounted via bearings in a bushing 12B. Also, the bolt is subjected to

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loading by a compression spring and is connected to an actuating lever (formed by the ring disposed on the end of the pin opposite fork pin 12A), which is mounted in a pivotable manner on a spindle (formed by the coupling housing that surrounds and supports the pin in coupling 32). See Figures 1B and 1N and column 8, lines 49-50 and 62-67.

In the event that the limitation "about a circumference" in claim 15 requires that a recess extend entirely around the circumference of the fork pin, Lee does not disclose such a circumference. However, Chiu teaches the desirability of providing a lockable caster with a recess 434 that extends entirely around the circumference of the fork pin 43 and which is engagable with a bolt 97. See Figures 3 and 4 and column 4, lines 2-5. From the teachings of Chiu, providing the fork pin of Lee with a recess that extends entirely around the circumference of the fork pin would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help guide the bolt into position on the fork pin.

### ***Allowable Subject Matter***

Claim 13 is allowed. Claim 13 requires the pivot lever to be mounted on a spindle connected to the bushing. These features, in combination with the further limitations of the claim, are not taught by the prior art.

Claim 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Claim 12 requires the linearly displaceable lever to have a run on slope that interacts with a radial

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shoulder of the bolt. These features, in combination with the further limitations of the claim, are not taught by the prior art.

Claims 17, 19, and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art does not teach an outer end of a steering linkage having both a horizontally running through-passage bore and a vertical bore, a vertically displaceable lever provided with a run-on-slope that interacts with the bolt, or two connected pivot levers with a pivoting motion initiated by a piston rod interacting with the fork. These features, in combination with the further limitations of the claims from which they depend, are not taught by the prior art.

### ***Response to Arguments***

Applicant's arguments filed July 7, 2005 have been fully considered but they are not persuasive.

In regard to the rejection of claim 12 under 35 USC 112, second paragraph, Applicant alleges that the use of "lever" is proper and not indefinite. The examiner respectfully disagrees. "[T]he lever" recited in at the end of line 2 in claim 11 is not indefinite because only the linearly displaceable lever could be the subject of this reference since the pivot lever cannot act on itself. However, either the linearly displaceable lever or the pivot lever could be the subject of the reference "the lever" in line 8 of claim 12.

The arguments present in regard to Körber et al. are moot in view of the new terms of rejection discussed above.

Furthermore, in regard to Kovacs, Applicant contends that the caster arrangement of Kovacs is not analogous to the caster arrangement of a wheelchair since the casters of Kovacs are mounted to a cart. However, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, arrangement of Kovacs is at least pertinent to the same problem with which applicant and Lee were concerned, releasably locking casters.

Also, members 44 and 26 of Kovacs form the claimed pivot-lever arrangement as discussed in the rejection above, contrary to Applicants assertion.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lauro and Theising disclose locking caster arrangements.

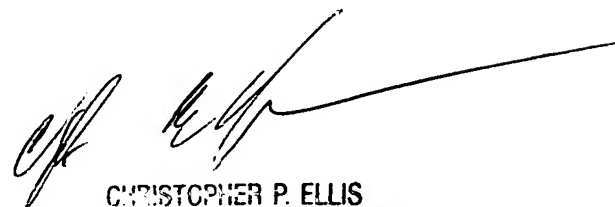
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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